

Amendment Pursuant to 37 CFR § 1.116
Docket No. D/98588
Attorney Docket No. 022.0363.US.UTL

REMARKS

Claims 1, 3-13 are pending. Claims 1 and 3 have been amended. Claims 1, 3-13 remain in the application.

Claims 1 and 3 have been amended to present the rejected claims in better form for consideration on appeal. No claim has been amended in response to the 35 U.S.C. 103(a) rejections. The amendments do not touch on the merits, so the amendments may be admitted without a showing of good and sufficient reasons why the amendments were necessary and were not earlier presented. 37 C.F.R. 1.116.

Claims 1, 3, 4, and 9 stand rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,963,134, issued to Bowers et al., in view of U.S. Patent No. 6,278,538, issued to Schleipen. Applicant traverses the rejection.

To establish a *prima facie* case of obviousness: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings; (2) there must be a reasonable expectation of success; and (3) the combined references must teach or suggest all the claim limitations. MPEP § 2143.

A *prima facie* case of obviousness has not been established. The Bowers patent discloses an inventory system using articles, such as library books, with radio frequency identification (RFID) tags (Abstract). An RFID tag is attached to each article and, when properly interrogated, the RFID tag returns unique information that can be used to determine the identity of the article and the proper location of the article in the library (Col. 7, lines 32-40). The RFID tags can be interrogated by readers and interrogators, which include smart pedestals, portable RFID scanners, or patron self-checkout stations (Col. 7, line 41 through Col. 8, line 26). Each RFID tag includes a passive resonant radio frequency circuit (RF) for use in detecting when the tag is within a zone monitored by a reader or interrogator (Col. 8, lines 36-40). Each reader or interrogator communicates with

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RFIDs tag by inductive coupling, which couples power to the RFID tag and receives data from the RFID tag (Col. 6, lines 38-40; Col. 9, lines 17-18). The output of the reader or interrogator is connected to a database for verifying whether the detected articles have been properly checked out (Col. 7, lines 53-56).

5 The Schleipen patent discloses an optical scanner that includes a radiation source for generating a radiation beam, such as a laser, and means for giving the radiation beam a two-dimensional scanning movement in first and second directions (Col. 1, lines 3-7). The scanning movement through one angular range is realized by rotating a grating and rotating reflecting element and through the
10 other angular range by varying the wavelength of the laser (Col. 1, lines 38-41). The deflection on the grating is dependent on the wavelength of the incident light of the laser (Col. 1, lines 41-44). In one embodiment, the optical scanner includes a laser that is a pulsed diode laser and the distance between the laser and an object can be determined in any arbitrary direction by registering the instant when the
15 reflected laser pulse echo is detected (Col. 2, lines 5-12).

First, the Bowers and Schleipen patents, taken as a whole, do not provide a suggestion, motivation, or reason to combine. Bowers and Schleipen are directed to solving different types of needs relating to objects found within or without a defined space. Bowers teaches verifying whether an article is properly checked
20 out from a library based on a preprogrammed information packet received back from a properly interrogated RFID tag (Col. 7, lines 37-40 and 53-56; Col 8, lines 60-63). Schleipen teaches scanning the surface of a three-dimensional object by means of a scanning laser beam and determining the direction of the position where the laser beam is incident on the object (Col. 4, lines 59-65). Bowers
25 teaches a convenient and more precise way of maintaining accurate records of available and outstanding articles. As articles enter or leave the controlled area, a library inventory database is automatically updated by scanning the RFID tags attached to each article. In contrast, Schleipen teaches determining the position of an object within a general area using a optical scanner with a two-dimensional
30 scanning movement. Schleipen fails to teach or suggest interacting with the

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object. Thus, one of ordinary skill in the art at the time of applicant's invention would not be motivated or have a reason to combine the RFID tag inventory system teachings of Bowers with the optical scanning teachings of Schleipen. Nor does Bowers provide any suggestion to combine the teachings of RFID tags
5 with the optical scanning as taught by Schleipen.

In addition, Bowers and Schleipen employ incompatible approaches to solving their respective needs. Bowers teaches a passive resonant RF circuit having a coil antenna and capacitor that derives power for the RFID tag when a signal at a predetermined resonant frequency is received (Col. 8, lines 40-44). An
10 interrogator or reader couples power to the RFID tag through the passive resonant RF circuit and receives back a data signal that can be used to determine the identity of the article and the proper location of the article (Col. 6, lines 38-40; Col. 7, lines 37-40). The interrogators and readers taught by Bowers provide both power to *and* receive data from RFID tags, whereas Schleipen merely detects
15 incident light reflected off objects. Thus, one of ordinary skill in the art at the time of applicant's invention would not be motivated or have a reason to combine the RF-powered RFID tag teachings of Bowers with the passive optical scanning teachings of Schleipen. Nor does Bowers provide any suggestion to combine the teachings of RF-powered RFID tags with the passive optical scanning as taught
20 by Schleipen.

Second, even when combined by picking and choosing selected parts, the Bowers and Schleipen patents do not teach or suggest all claim limitations when considered in light of the disclosure of each respective patent. Bowers teaches RFID tags returning unique information for determining an identity of an article
25 in response to passive resonant RF signals (Col. 7, lines 37-40). Schleipen teaches a pulsed laser beam for use in obtaining depth information from a reflected laser pulse echo and passively scanning and recording three-dimensional objects by determining their shapes, dimensions and positions (Col. 2, lines 8-12; Col. 4, line 52 through Col. 5, line 31). Bowers fails to teach or suggest the use of
30 a laser beam and teaches away by teaching the use of a passive resonant RF signal

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as a power source. Schleipen fails to teach or suggest the use of an interactive tag reactive to incident laser beams. Thus, Bowers and Schleipen fail to teach or suggest a tag reactive to incident laser beams to provide a data signal, per Claims 1 and 3.

5 Finally, if combined, the Bowers and Schleipen patents do not provide a reasonable expectation of success. Combining the RF-powered RFID tags taught by Bowers with the optical scanning taught by Schleipen would result in an inventory system using sensor-triggered tags on tracked objects coupled with a radiation source that passively scans, but does not trigger, the tags on the objects
10 in two dimensional space. Thus, when combined, Bowers and Schleipen would provide an inoperative result, as no data signal would be provided by the tag and no input would be received by a tag tracking system, per Claims 1 and 3. Furthermore, such a combination would still be limited to only providing the shape, dimension and position of each object and would fail to store state records
15 of position and informational content of the tag, per Claims 1 and 3.

Thus, a *prima facie* case of obviousness has not been shown with respect to Claims 1 and 3. Claim 4 is dependent on Claim 1 and is patentable for the above-stated reasons, and as further distinguished by the limitations recited therein. Claim 9 dependent on Claim 3 and is patentable for the above-stated
20 reasons, and as further distinguished by the limitations recited therein. As a *prima facie* case of obviousness has not been shown, withdrawal of the rejection of Claims 1, 3, 4, and 9 for obviousness under 35 U.S.C. 103(a) is requested.

Claims 5-8 and 10-13 stand rejected under 35 U.S.C. 103(a) as being obvious over Bowers et al. as modified by Schleipen as applied to Claim 1 above,
25 and further in view of U.S. Patent No. 6,005,482, issued to Moran et al. Applicant traverses the rejection.

As argued above with respect to the rejection of Claims 1, 3, 4, and 9 for obviousness over Bowers et al., in view of Schleipen, a *prima facie* case of obviousness has not been shown. Claims 5-8 are dependent on Claim 1 and are
30 patentable for the above-stated reasons, and as further distinguished by the

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limitations recited therein. Claims 10-13 are dependent on Claim 3 and are patentable for the above-stated reasons, and as further distinguished by the limitations recited therein.

5 The prior art made of record and not relied upon has been reviewed by the applicant and is considered to be no more pertinent than the prior art references already applied.

Claims 1, 3-13 are believed to be in condition for allowance. Entry of the foregoing amendments is requested and a Notice of Allowance is earnestly solicited. Please contact the undersigned at (206) 381-3900 regarding any
10 questions or concerns associated with the present matter.

Respectfully submitted,

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Final OA Response